(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/063484 A1

- B32B 27/18, (51) International Patent Classification⁷: 7/02, C08F 214/28, 216/12, G02B 1/11, 5/30
- (21) International Application Number:

PCT/JP2004/019752

English

(22) International Filing Date:

24 December 2004 (24.12.2004)

(25) Filing Language:

(26) Publication Language: **English**

(30) Priority Data:

2003-434142	26 December 2003 (26.12.2003)	JP
2004-006062	13 January 2004 (13.01.2004)	JP
2004-035077	12 February 2004 (12.02.2004)	JP
2004-065991	9 March 2004 (09.03.2004)	JP
2004-096227	29 March 2004 (29.03.2004)	JP

- (71) Applicant (for all designated States except US): FUJI PHOTO FILM CO., LTD. [JP/JP]; 210, Nakanuma, Minami-Ashigara-shi, Kanagawa 2500123 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): IKEDA, Akira. MURAMATSU, Yuzo. KATO, Eiichi. NAKAMURA, Kazuhiro.
- (74) Agents: OGURI, Shohei et al.; Eikoh Patent Office, 13th Floor, ARK Mori Building, 12-32, Akasaka 1-chome, Minato-ku, Tokyo 1076013 (JP).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ANTIREFLECTION FILM, POLARIZING PLATE, METHOD FOR PRODUCING THEM, LIQUID CRYSTAL DIS-PLAY ELEMENT, LIQUID CRYSTAL DISPLAY DEVICE, AND IMAGE DISPLAY DEVICE

(57) Abstract: To provide an antireflection film which is easily and inexpensively producible and which has an antireflection property, a scratch resistance and a stain resistance in a sufficient level, and a polarizing plate and a liquid crystal display device utilizing the antireflection film of such excellent ability, the antireflection film includs a transparent support and a low-refractive index layer having a lower refractive index than the transparent support, wherein the low-refractive index layer is an outermost layer, and the low-refractive index layer contains a hollow silica particle and a compound that reduces a surface free energy of the outermost layer.



